

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-16. (canceled)

17. (currently amended) An information recording medium comprising a plurality of recording layers to record therein information, wherein

at least one of the plurality of recording layers has a management information area to record therein at least (i) first recording condition information which indicates ~~an~~ a first optimum recording condition for each a first recording layer of the plurality of recording layers when the information is recorded into the first recording layer and (ii) a second recording condition information which indicates a second optimum recording condition for a second recording layer of the plurality of recording layers when the information is recorded into the second recording layer,

at least (i) a first recording speed information which indicates ~~the~~ a first recordable maximum speed for each of the plurality of the first recording layers layer and (ii) a second recording speed information which indicates a second recordable

maximum speed for the second recording layer are ~~is~~ recorded in the management information area,

the first recording condition information for ~~each of the plurality of the first recording layer layers~~ is recorded in the management information area, correspondingly to the first recording speed information,

the second recording condition information for the second recording layer is recorded in the management information area correspondingly to the second recording speed information,

the management information area is disposed nearer an inner circumference in a top layer out of the plurality of recording layers and includes a portion in which the recording condition information with respect to the plurality of recording layers is collectively recorded,

the first and second recording condition information ~~includes~~ include strategy information.

18-19. (cancelled)

20. (currently amended) The information recording medium according to claim 17, wherein a table on which the first and second recording speed information and the first and second recording condition information are registered for each of the plurality of recording layers, and which has an index, is recorded in the management information area.

21. (previously presented) The information recording medium according to claim 17, wherein identification information for identifying said information recording medium is recorded in the management information area.

22. (previously presented) The information recording medium according to claim 17, wherein the recording condition information is at least partially recorded from the beginning of production of said information recording medium, as pre-information of said information recording medium.

23. (currently amended) The information recording medium according to claim 17, wherein the first and second recording condition information ~~is~~are at least partially recorded or updated, as written-once or rewritable information.

24. (cancelled)

25. (previously presented) The information recording medium according to claim 17, wherein the management information area is disposed in each of the recording layers.

26. (currently amended) The information recording medium according to claim 17, wherein the first and second

recording speed information is defined to indicate a higher speed in an upper layer side out of the plurality of recording layers.

27. (currently amended) An information recording apparatus for recording information onto an information recording medium comprising a plurality of recording layers to record therein the information, wherein at least one of the plurality of recording layers has a management information area to record therein at least (i) first recording condition information which indicates a first an optimum recording condition for each a first recording layer of the plurality of recording layers when the information is recorded, into the first recording layer and (ii) a second recording condition information which indicates a second optimum recording condition for a second recording layer of the plurality of recording layers when the information is recorded into the second recording layer, at least (i) a first recording speed information which indicates the a first recordable maximum speed for each of the plurality of the first recording layers layer and (ii) a second recording speed information which indicates a second recordable maximum speed for the second recording layer are ~~is~~ recorded in the management information area, the first recording condition information for each of the plurality of the first recording layers layer is recorded in the management information area, correspondingly to the first recording speed information, the second recording condition

information for the second recording layer is recorded in the management information area, correspondingly to the second recording speed information, the management information area is disposed nearer an inner circumference in a top layer out of the plurality of recording layers, and includes a portion in which the recording condition information with respect to the plurality of recording layers is collectively recorded, the first and second recording condition information ~~includes~~ include strategy information,

said information recording apparatus comprising:

a reading device for reading the first and second recording condition information from the management information area;

a recording speed setting device for setting a recording speed corresponding to a recording target layer in which the information is to be recorded, on the basis of the read first and second recording condition information; and

a recording device for recording the information into the recording target layer at the set recording speed.

28. (currently amended) The information recording apparatus according to claim 27, wherein

said recording speed setting device sets the recording speed and the optimum recording condition corresponding to the recording target layer, on the basis of the first and second

recording speed information and the first and second recording condition information.

29. (currently amended) The information recording apparatus according to claim 27, wherein

said information recording apparatus further comprises a storing device in which at least (i) the first recording condition information which indicates ~~an~~ the first optimum recording condition for ~~each of a plurality of the first~~ recordable maximum ~~speeds~~ speed and (ii) the second recording condition information which indicates the second optimum recording condition for the second recordable maximum speed is registered,

said reading device reads the first and second recording speed information from the management information area, and

said recording speed setting device sets the recording speed and the optimum recording condition, on the basis of (i) the read first and second recording speed information and (ii) a first and second recording condition information which corresponds to the read first and second recording speed information, ~~out of the recording condition information which is~~ are registered in said storing device.

30. (currently amended) The information recording apparatus according to claim 27, wherein

identification information for identifying said information recording medium is recorded in the management information area,

said information recording apparatus further comprises a storing device in which at least (i) the first recording speed information which indicates the first recordable maximum speed and (ii) the second recording speed information which indicates the second recordable maximum speed and at least (iii) the first recording condition information which indicates an the first optimum recording condition for each of a plurality of the first recordable maximum speeds speed and (iv) the second recording condition information which indicates the second optimum recording condition for the second recordable maximum speed are registered, for each identification information for identifying respective one of a plurality of information recording media,

said reading device reads the identification information from the management information area, and

said recording speed setting device sets the recording speed and the optimum recording condition, on the basis of ~~a~~ the first and second recording speed information and an the first and second optimum recording condition information which correspond to the read identification information, ~~out of the recording~~

~~speed information and the recording condition information~~ which are registered in said storing device.

31. (currently amended) An information recording method of recording information onto an information recording medium comprising a plurality of recording layers to record therein the information, wherein at least one of the plurality of recording layers has a management information area to record therein at least (i) first recording condition information which indicates ~~an~~ a first optimum recording condition for ~~each~~ a first recording layer of the plurality of recording layers when the information is recorded into the first recording layer and (ii) a second recording condition information which indicates a second optimum recording condition for a second recording layer of the plurality of recording layers when the information is recorded into the second recording layer, at least (i) a first~~7~~ recording speed information which indicates ~~the~~ a first recordable maximum speed for ~~each of the plurality of the first recording layers~~ layer and (ii) a second recording speed information which indicates a second recordable maximum speed for the second recording layer ~~are~~ is recorded in the management information area the first recording condition information for ~~each of the plurality of the first recording layer layers~~ is recorded in the management information area correspondingly to the first recording speed information, the second recording condition

information for the second recording layer is recorded in the management information area correspondingly to the second recording speed information, the management information area is disposed nearer an inner circumference in a top layer out of the plurality of recording layers and includes a portion in which the recording condition information with respect to the plurality of recording layers is collectively recorded, the first and second recording condition information include—includes strategy information,

said information recording method comprising:

a reading process of reading the first and second recording condition information from the management information area;

a recording speed setting process of setting a recording speed corresponding to a recording target layer in which the information is to be recorded, on the basis of the read first and second recording condition information; and

a recording process of recording the information into the recording target layer at the set recording speed.

32. (cancelled)

33. (currently amended) The information recording medium according to claim 17, wherein the first and second

recording condition information ~~includes~~ include optimum power
information of laser for recording.